

ABSTRACT OF THE DISCLOSURE

A method, used in a powertrain of a motor vehicle having an engine, a secondary power source, and a step-change automatic transmission for driving a load, controls an upshift from a current gear to a next gear and includes the steps of

5 establishing first shift points of a demanded engine output and a corresponding vehicle speed, at which the upshift would occur if the engine were the only power source. The length of a first period in which energy is available to the secondary power source is determined. The length of a second period for the current vehicle speed to increase to a target vehicle speed of a first shift point whose corresponding demanded engine

10 output is equal to a combined current demanded output of the engine and secondary power source is determined. The upshift is produced if the length of the second period is equal to or greater than the length of the first period.